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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,303	02/09/2001	Ronald L. Panter	P-3001.2ITEC	6780
7590 11/10/2003			EXAMINER	
Reising, Ethington, Barnes, Kisselle, Learman & McCulloch, P.C. P.O. Box 4390 Troy, MI 48099			LISH, PETER J	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A9

<b>Advisory Action</b>	Application No. 09/780,303	Applicant(s) PANTER ET AL.	
	Examiner Peter J Lish	Art Unit 1754	

--Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 9/30/03 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
 ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
 2. ☐ The proposed amendment(s) will not be entered because:  
 (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ they raise the issue of new matter (see Note below);  
 (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached sheet.  
 6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
 7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 1-7, 18 and 19.

Claim(s) objected to: NONE.

Claim(s) rejected: 8-17 and 20-27.

Claim(s) withdrawn from consideration: 28-38.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
 9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.  
 10. ☐ Other: \_\_\_\_\_

  
**STUART L. HENDRICKSON**  
 PRIMARY EXAMINER

Applicant's arguments filed 9/30/03 have been fully considered but they are not persuasive. Applicant argues that the relocation of the carbonization heating zone of Pepper et al. from a furnace separate from the stabilization heating zones to a heating zone which is within the same furnace walls as the stabilization heating zones represents a change in the operation of the device. It is maintained by the examiner that the relocation of the heating zone does not represent a change in its operation, rather it represents a relocation into a larger enclosed structure. No change in operation is shown; it is merely claimed that now a single enclosed structure provides both operations, rather than two separately enclosed structures. Regarding applicant's arguments that there would have been no motivation to relocate the heating zone, as such, it is maintained by the examiner that the motivation lies in the obviousness to relocate parts without changing their operation, held by *In re Japinske*, as well as in the implicit cause of minimizing space and capital costs.

Regarding applicant's arguments, drawn to claim 9, that there is no motivation to combine the teachings of Pepper et al. with those of Uchida et al., applicant is pointed to the implicit motivation to lower costs by eliminating the need for an additional gas supply.

Regarding applicant's arguments that the exact temperatures and exposure times of claims 14-17 are not accounted for, applicant points to the following excerpt from the rejection of the previous office action: "The exact temperature or residence time in each heating zone are not explicitly taught by Pepper et al., however, finding the optimum temperature and residence time within each heating zone and correspondingly adjusting them would have been obvious to one of ordinary skill at the time of invention. Because the temperatures and residence times of the applicant are within the ranges taught by Pepper et al., and could have been found through

routine experimentation, they are considered to be an optimization of a known process, held to be obvious under *In re Boesch* (205 USPQ 215) unless significantly unexpected and difference results can be shown.” Regarding applicant’s arguments that the addition of air into each of the heating zones is not accounted for, examiner points to the following excerpt from the rejection of the previous office action: “The oxidation treatment consists of blowing an oxidizing gas, such as air, over the fibers while the fibers are heated from a temperature of about 180 °C at the entrance of the furnace to 300 °C at the exit of the furnace.”

Regarding applicant’s arguments, drawn to claim 20, that Pepper does not teach the use of an additional furnace at high temperature to graphitize the carbon fiber, applicant is pointed to column 5, lines 54-63, which recites that the carbon materials may be further heated and graphitized at a temperature up to about 3000 °C.

Regarding applicant’s arguments, drawn to claim 21, that adjusting the fiber draw rate to optimize does not represent optimization of a known process, as held to be obvious by *In re Boesch*, examiner maintains that the selection of a specific optimum draw rate and the adjustment necessary to achieve this draw rate are analogous. Regarding applicant’s arguments, drawn to claims 22-23, that it cannot be expected that a fiber be exposed to conditions outside of those of the furnaces when traveling between individual furnaces nor that a fiber be enclosed to the conditions of a furnace when traveling within a multi-zone furnace, it is maintained by the examiner that this is expected. Applicant agrees that a furnace is a separately enclosed body, therefore, in order for the fiber to travel from one furnace to another, it must travel through an area not enclosed by the same structure and likewise, for the fiber to travel from one zone to another within a single furnace, it must remain enclosed by that furnace.